



# **STIC Search Report**

## **EIC 1700**

**STIC Database Tracking Number: 119444**

**TO: Mulero Luz L Alejandro**  
**Location: REM 7A19**  
**Art Unit : 1763**  
**April 15, 2004**

**Case Serial Number: 09/478370**

**From: Kendra Mellerson**  
**Location: EIC 1700**  
**REM 4B28**  
**Phone: 571-272-2516**

**Kendra.Mellerson@uspto.gov**

### **Search Notes**

No Cases Reported

US 5,792,261

## Current session 15/04/2004

(C) QUESTEL 1994  
QUESTEL.ORBIT (TM) 1998 15/04/04 14\*34\*31  
Last connection: 09/04/04 16\*47\*18

WELCOME to QUESTEL.ORBIT- Your Guide to INTELLECTUAL PROPERTY  
www.questel.orbit.com - Gateway, documentation & IP resource  
- PCTFULL: PCT fulltext - contents & prices, see INFO PCTFULL  
- NEW: Non-Patent Literature file from EPO data, see INFO NPL  
- NEW: Starting 09/03, MEM Chrg for Sci-Tech Files, see INFO MEM  
- French Patent Applications Fulltext file, see INFO FRFULL  
- NTIS & IDPFA/N to be removed from Questel.Orbit Jan 1, 2004  
- Citations for GB patents now available in the PlusPat file.  
- 2004 Euro & US Dollar Price Lists available on our web-site  
..FILE / ..INFO / ..GUIDE

## Query/Command : FILE PLUSPAT

QUESTEL - Time in minutes : 0,65  
The cost estimation below is based on Questel's  
standard price list

Estimated cost :	0.65 USD
Cost estimated for the last database search :	0.65 USD
Estimated total session cost :	0.65 USD

Selected file: PLUSPAT

PLUSPAT - (c) Questel-Orbit, All Rights Reserved.  
Comprehensive Worldwide Patents database  
New Patent Citation Commands & FAM Citation Report - see INFO PATCITE  
GB Citations Now Available in PlusPat  
GB citations have been added to over 200,000 corresponding GB records in  
PlusPat. Coverage starts in the 1980's and is updated monthly.  
PlusPat now covers cited references from US, EP, PCT, FR and now GB.  
Last update of file: 2004/04/07 (YYYY/MM/DD) 2004-14/UP (basic update)

Search statement 1

## Query/Command : US5792261/PN

## \*\* SS 1: Results 1

Search statement 2

## Query/Command : PRT FULL NONSTOP LEGALALL

---

*1 / 1 PLUSPAT - ©QUESTEL-ORBIT - image*

**PN** - US5792261 A 19980811 [US5792261]  
**TI** - (A) Plasma process apparatus  
**PA** - (A) TOKYO ELECTRON LTD (JP)  
**PA0** - Tokyo Electron Limited, Tokyo [JP]  
**IN** - (A) HAMA KIICHI (JP); HATA JIRO (JP); HONGO TOSHIKI (JP)  
**AP** - US62410296 19960329 [1996US-0624102]  
**FD** - Cont. of US357423 19941216 [1994US-0357423]  
 Continuation of: US5525159  
**PR** - US62410296 19960329 [1996US-0624102]  
 JP34387193 19931217 [1993JP-0343871]  
 JP7671794 19940323 [1994JP-0076717]  
 JP7672794 19940323 [1994JP-0076727]  
 US35742394 19941216 [1994US-0357423]  
**IC** - (A) C23C-016/00  
**EC** - C23C-016/44A4  
 C23C-016/455  
 C23C-016/50  
 C23C-016/505  
**ICO** - M23C-016/44E20  
 T01J-237/32C  
**PCL** - ORIGINAL (O) : 118723000I; CROSS-REFERENCE (X) : 118723000R  
 156345260 156345290 156345370 156345480  
**DT** - Basic  
**CT** - US4563367; US5167717; US5280154; US5326404; US5413684; US5494522;  
 US5542559; US5580385  
**STG** - (A) United States patent  
**AB** - A plasma CVD apparatus for forming a silicon film on an LCD substrate  
 includes a container which is divided into process and upper chambers by a  
 quartz partition plate. A work table on which the substrate is mounted is arranged  
 in the process chamber and a lower electrode to which a high frequency potential  
 is applied is arranged in the work table. First lower and second upper supply  
 heads are arranged between the partition plate and the work table in the process  
 chamber. SiH<sub>4</sub> and H<sub>2</sub> gas and He gases are supplied through the first and  
 second supply heads. He gas is transformed into plasma while SiH<sub>4</sub> and H<sub>2</sub> gas  
 is excited and decomposed by the plasma thus formed. Two coils are arranged in  
 the upper chamber and high frequency voltages are applied to the coils to  
 generate electromagnetic field to induce the transforming of He gas into plasma.  
 High frequency voltages applied to the coils are the same in phase and directions  
 of current flowing through adjacent portions of the coils are the same.

---

*1 / 1 LGST - ©EPO*

**PN** - US5792261 A 19980811 [US5792261]  
**AP** - US62410296 19960329 [1996US-0624102]  
**ACT** - 20000829 US/RF-A

REISSUE APPLICATION FILED  
EFFECTIVE DATE: 20000106

UP - 2003-22

---

1/1 CRXX-©CLAIMS/RRX

PN - 5,792,261 A 19980811 [US5792261]

PA - Tokyo Electron Ltd JP

ACT - 20000106 REISSUE REQUESTED

Issue Date of O.G.: 20000829

Reissue Request Number: 09/478370

Examination Group responsible for Reissue process: 1763

Query/Command : FILE INPADOC

PLUSPAT - Time in minutes : 0,56

The cost estimation below is based on Questel's  
standard price list

	Estimated cost :	1.35 USD
Records displayed and billed :	1	
	Estimated cost :	1.32 USD
Cost estimated for the last database search :		2.67 USD
Estimated total session cost :		3.32 USD

LGST - Time in minutes : 0,09

The cost estimation below is based on Questel's  
standard price list

	Estimated cost :	0.11 USD
Records displayed and billed :	1	
	Estimated cost :	0.60 USD
Legal-Status informations :	1	
	Estimated cost :	0.50 USD
Cost estimated for the last database search :		1.21 USD
Estimated total session cost :		4.53 USD

CRXX - Time in minutes : 0,06

The cost estimation below is based on Questel's  
standard price list

	Estimated cost :	0.10 USD
Records displayed and billed :	1	
	Estimated cost :	5.50 USD
Legal-Status informations :	1	
	Estimated cost :	0.50 USD
Cost estimated for the last database search :		6.10 USD
Estimated total session cost :		10.63 USD

LITA - Time in minutes : 0,01

The cost estimation below is based on Questel's  
standard price list

	Estimated cost :	0.02 USD
Cost estimated for the last database search :		0.02 USD
Estimated total session cost :		10.65 USD

Selected file: INPADOC

You are now connected to INPADOC

Covers 1968/1973 thru weekly updates (2004-15)  
For information on content, (...)INFO INPD.

Search statement 1

Query/Command : FAM US5792261/PN

1 Patent Groups

\*\* SS 1: Results 7

Search statement 2

Query/Command : FAMSTATE NONSTOP

---

1 / 7 INPADOC - ©INPADOC

**PN** - JP 3150027 B2 20010326 [JP3150027]  
**AP** - JP 76717/94-A 19940323 [1994JP-0076717]  
**PR** - JP 76717/94-A 19940323 [1994JP-0076717]  
JP 343871/93-A 19931217 [1993JP-0343871]  
**IC** - H01L-021/205; C23C-016/505; G02F-001/1368; H01L-021/31; H05H-001/46

---

2 / 7 INPADOC - ©INPADOC

**PN** - JP 3422583 B2 20030630 [JP3422583]  
**AP** - JP 329329/94-A 19941201 [1994JP-0329329]  
**PR** - JP 329329/94-A 19941201 [1994JP-0329329]  
JP 76727/94-A 19940323 [1994JP-0076727]  
**IC** - H01L-021/205; C23C-016/44; H01L-021/3065; H01L-021/31; H05H-001/46

---

3 / 7 INPADOC - ©INPADOC

**PN** - JP 7226383 A2 19950822 [JP07226383]  
**TI** - PLASMA GENERATING DEVICE AND PLASMA TREATMENT DEVICE  
USING THIS PLASMA GENERATING DEVICE  
**IN** - HAMA KIICHI; HATA JIRO  
**PA** - TOKYO ELECTRON LTD  
**AP** - JP 76717/94-A 19940323 [1994JP-0076717]  
**PR** - JP 76717/94-A 19940323 [1994JP-0076717]  
JP 343871/93-A 19931217 [1993JP-0343871]  
**IC** - H01L-021/205; C23C-016/50; H01L-021/31

---

4 / 7 INPADOC - ©INPADOC

**PN** - JP 7312348 A2 19951128 [JP07312348]  
**TI** - METHOD AND APPARATUS FOR TREATMENT  
**IN** - HATA JIRO; HAMA KIICHI; HONGO TOSHIAKI  
**PA** - TOKYO ELECTRON LTD  
**AP** - JP 329329/94-A 19941201 [1994JP-0329329]  
**PR** - JP 329329/94-A 19941201 [1994JP-0329329]  
JP 76727/94-A 19940323 [1994JP-0076727]  
**IC** - H01L-021/205; H01L-021/31; H05H-001/46

---

5 / 7 INPADOC - ©INPADOC

**PN** - KR 272189 B1 20001201 [KR-272189]  
**TI** - PLASMA TREATMENT APPATATUS  
**IN** - HAMA KIICHI [JP]; HATA JIRO [JP]; HONGO DOSHIAKI [JP]  
**PA** - TOKYO ELECTRON LTD [JP]  
**AP** - KR 9434797/94-A 19941217 [1994KR-0034797]  
**PR** - JP 343871/93-A 19931217 [1993JP-0343871]  
JP 76717/94-A 19940323 [1994JP-0076717]  
JP 76727/94-A 19940323 [1994JP-0076727]  
**IC** - H01L-021/302

---

6 / 7 INPADOC - ©INPADOC

**PN** - US 5525159 A 19960611 [US5525159]  
**TI** - PLASMA PROCESS APPARATUS  
**IN** - HAMA KIICHI [JP]; HATA JIRO [JP]; HONGO TOSHIAKI [JP]  
**PA** - TOKYO ELECTRON LTD [JP]  
**AP** - US 357423/94-A 19941216 [1994US-0357423]  
**PR** - JP 343871/93-A 19931217 [1993JP-0343871]  
JP 76717/94-A 19940323 [1994JP-0076717]  
JP 76727/94-A 19940323 [1994JP-0076727]  
**IC** - C23C-016/00

---

1 / 1 LEGALI - ©EPO

**PN** - US5525159 A 19960611 [US5525159]  
**AP** - US35742394 19941216 [1994US-0357423]  
**ACTE** - 19941216 US/AS02-A  
ASSIGNMENT OF ASSIGNOR'S INTEREST  
OWNER: TOKYO ELECTRON LIMITED 3-6 AKASAKA 5-CHOME,  
MINATO; EFFECTIVE DATE: 19941208  
  
19941216 US/AS02-A  
ASSIGNMENT OF ASSIGNOR'S INTEREST  
OWNER: HAMA, KIICHI; EFFECTIVE DATE: 19941208

19941216 US/AS02-A  
ASSIGNMENT OF ASSIGNOR'S INTEREST  
OWNER: HATA, JIRO; EFFECTIVE DATE: 19941208

19941216 US/AS02-A  
ASSIGNMENT OF ASSIGNOR'S INTEREST  
OWNER: HONGO, TOSHIKI; EFFECTIVE DATE: 19941208

**UP** - 2003-22

---

7 / 7 INPADOC - ©INPADOC

**PN** - US 5792261 A 19980811 [US5792261]  
**TI** - PLASMA PROCESS APPARATUS  
**IN** - HAMA KIICHI [JP]; HATA JIRO [JP]; HONGO TOSHIKI [JP]  
**PA** - TOKYO ELECTRON LTD [JP]  
**AP** - US 624102/96-A 19960329 [1996US-0624102]  
**PR** - US 624102/96-A 19960329 [1996US-0624102]  
JP 343871/93-A 19931217 [1993JP-0343871]  
JP 76717/94-A 19940323 [1994JP-0076717]  
JP 76727/94-A 19940323 [1994JP-0076727]  
US 357423/94-A1 19941216 [1994US-0357423]  
**IC** - C23C-016/00

---

1 / 1 LEGALI - ©EPO

**PN** - US5792261 A 19980811 [US5792261]  
**AP** - US62410296 19960329 [1996US-0624102]  
**ACTE** - 20000829 US/RF-A  
REISSUE APPLICATION FILED  
EFFECTIVE DATE: 20000106  
**UP** - 2003-22

PATNO IS 5792261

DATE: APRIL 15, 2004  
LIBRARY: PATENT  
FILE: ALL

Your search request is:  
PATNO IS 5792261

Number of PATENTS found with your search request through:  
LEVEL 1... 1

Your search request has found 1 PATENT through Level 1.  
To DISPLAY this PATENT press either the KWIC, FULL, CITE or SEGMENTS key.  
To MODIFY your search request, press the M key (for MODIFY) and then the ENTER key.

For further explanation, press the H key (for HELP) and then the ENTER key.



LEVEL 1 - 1 PATENT

1. 5792261 , August 11, 1998 , Plasma process apparatus, Hama, Kiichi, Chino, JP; Hata, Jiro, Yamanashi-ken, JP; Hongoh, Toshiaki, Yamanashi-ken, JP, 624102 (08), Tokyo Electron Limited, Tokyo, JP

CORE TERMS: substrate, chamber, coil, gas, plasma, pipe, film, sub, supplied, electrode ...

LEVEL 1 - 1 OF 1 PATENT

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

5792261

<=1> GET 1st DRAWING SHEET OF 10

August 11, 1998

Plasma process apparatus

REISSUE: Reissue Application filed Jan. 6, 2000 (O.G. Aug. 29, 2000) Ex. Gp.:  
1763; Re. S.N. 09/478,370, (O.G. August 29, 2000)

APPL-NO: 624102 (08)

FILED-DATE: March 29, 1996

GRANTED-DATE: August 11, 1998

CORE TERMS: substrate, chamber, coil, gas, plasma, pipe, film, sub, supplied,  
electrode ...

5792261 OR 5,792,261

Your search request has found no CASES.

To edit the above request, use the arrow keys. Be sure to move the cursor to the end of the request before you enter it.

To enter a new search request, type it and press the ENTER key.

What you enter will be Search Level 1.

For further explanation, press the H key (for HELP) and then the ENTER key.